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REMARKS

This Amendment is being filed in response to the Office Action dated June 29, 2004. For the following reasons, this Application should be considered in condition for allowance and the case passed to issue.

The Examiner in charge of the above-identified Application, Examiner Blount, is thanked for the courtesies extended during the course of the telephonic interview on September 29, 2004. Although no firm agreement was reached during the interview, Applicant's representative was provided the opportunity to explain the invention and the differences between the same and the cited art references. These remarks reflect and expand on the discussion of the invention that took place during the interview.

Claims 8 and 15 were objected to because of an informality. Claim 8 has been amended to correct this informality, and claim 15 has been canceled. Reconsideration and withdrawal of the objection to claims 8 and 15 are therefore respectfully requested.

Claims 1-7 and 15 were rejected under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the subject matter regarded as the invention. Claim 15 has been canceled, and claim 1 has been amended in accordance with the Examiner's suggestion. Reconsideration and withdrawal of the rejection of claims 1-7 and 15 under 35 U.S.C. § 112, second paragraph, are respectfully requested.

Claims 1-11 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. In particular, the Examiner stated that each of the independent claims included retrying registration after "inhibiting switching to a good pilot signal" (i.e., after handoff is inhibited). The Examiner stated that in the specification, handoff was inhibited only after the process of attempting to register has ended (i.e., after the given number n has been

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reached). The Examiner cited page 21, lines 6+ of the specification. This rejection is hereby traversed and reconsideration and withdrawal of the rejection is respectfully requested.

In particular, as discussed during the interview, a retry of registration after inhibiting switching to a pilot signal (after handoff is inhibited) is specifically and properly described. For example, Fig. 4 shows, in step S405, the step of inhibiting idle handoff. Another retry of registration, following the inhibiting of the idle handoff in step S405, is performed in step S409. It is determined, then, in step S410, whether the registration was unsuccessful. The application at page 15, line 1 to page 18, line 10, describes this feature. The application therefore clearly describes, and actually shows (Fig. 4), the claimed retrying registration after "inhibiting switching to a good pilot signal" (i.e., after handoff is inhibited). Hence, the rejection of claims 1-11 under 35 U.S.C. § 112, first paragraph, should be reconsidered and withdrawn and such action is respectfully requested.

The indication of allowability of claims 1-11, subject to the rejection of 35 U.S.C. § 112, first paragraph, is gratefully acknowledged. The only remaining rejection is that of claims 12-15 under 35 U.S.C. § 103(a) as being unpatentable over Applicant's admitted prior art (hereafter AAPA) in view of either Hong et al. or Fujimoto. These rejections are respectively traversed, and reconsideration and withdrawal thereof are respectfully requested. The following is a comparison of the present invention that is currently claimed in claims 12-14, with the AAPA and Hong and Fujimoto references.

Claim 12 relates to a station for use in a CDMA mobile communication system, and comprises a receiver which receives a wireless signal transmitted by a sector or a base station, and a CDMA modem connected to the receiver. This modem performs a despreading modulation operation of the wireless signal received by the receiver. This station also comprises

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a controller that controls a pilot synchronization operation including an acquisition of a pilot signal and a registration operation that includes a plurality of access sequences to the sector or the base station when the acquisition of a pilot signal is successful. The controller turns off the receiver when the mobile station fails in registration to the sector or the base station after the registration operations are performed a predetermined number of times. Neither of the references, nor the AAPA, either alone or in combination, show or suggest the invention is now claimed.

In normal CDMA mobile communication systems, a mobile station exchanges messages with the base station. In certain situations, for example, when the mobile station is used in a tall building, the mobile station receives a downlink signal from a long distance base station. However, an uplink signal from the mobile station may not reach the base station because the base station is located a far distance away and the uplink signal is weaker than the downlink signal. This causes a problem in that the mobile terminal keeps performing a registration operation even though the uplink signal does not reach the base station. In order to solve the problem, the mobile station of the present invention turns off the receiver when the mobile station fails in registration after the registration operation including a plurality of access sequences to the base station are performed a predetermined number of times. This happens even though the acquisition of the pilot signal was successful.

Furthermore, it is difficult to determine whether a mobile station is in an incommunication zone in which the uplink signal does not reach the base station. This is because in a CDMA system, the strength of a signal transmitted from a base station in response to an uplink signal is unstable because a plurality of signals from base stations are sent through one frequency band and the signals interfere with one another. Even though the uplink signal

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reaches the base station, the mobile station cannot receive a response signal from the base station and cannot complete the registration temporarily.

The Examiner relies upon the AAPA provided by the Applicants at page 3, lines 1 et seq. In particular, the AAPA describes a mobile station that has finished the synchronization processing performs registration. The registration is carried out by exchanging messages with the base station. This permits the network to call the mobile station. Since the registration involves transmission, if registration is frequently done, traffic on the network increases. Also, the battery power on the mobile station is consumed. Accordingly, the registration needs to be carried out minimally. This passage describing the AAPA merely describes normal operation and suggests nothing with respect to how to conserve battery power in such a CDMA system. Furthermore, battery power is always consumed during operation of a mobile station, and there is nothing in the AAPA that suggests that this particular type of battery consumption is a particular problem recognized by others of skill in the art as one needing to be solved, much less suggesting the solution to such a problem. The AAPA, as described in the present Application, merely describes a conventional CDMA system without providing any suggestion regarding conservation of battery power, nor recognizing the concerns regarding the particular situation described in claim 12. This situation is what to do after a controller of the CDMA mobile communication system acquires a pilot signal and performs a registration operation that includes a plurality of access sequences to the sector or the base station when the acquisition of the pilot signal is successful, but the mobile station fails in registration to the sector or the base station. The above passage shows that there is no description of such a situation in the AAPA. Neither of the cited patents, Hong or Fujimoto, fill in these gaps of the AAPA.

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Hong, U.S. Patent No. 6,292,508, relates to a method and apparatus for managing power in a frequency hopping medium access control protocol. It does not operate in the claimed manner in which a pilot signal has been successfully acquired, but a registration operation by the mobile station fails a predetermined number of times. Referring to column 21, lines 18-34, after entering an inactive state, a node can synchronize to the master to receive a wakeup message. After waking up to receive a subsequent sync message, if the node does not receive a sync message or wakeup message from the master, the node will try to synchronize to the master station by going through a search procedure with respect to a frequency hopping network. If the node cannot synchronize after scanning a predetermined number of times, the node can be configured to extend its sleep time.

Hence, Hong fails to recognize the problem associated with the situation in which the uplink signal from the mobile station does not reach the base station such that the mobile station cannot register to the base station even though the mobile station successfully receives a downlink signal from the base station and the synchronization is successful. Additionally, Hong fails to show a registration operation that includes a plurality of access sequences and that turns off the receiver when the mobile station fails to register after the registration operations are performed a predetermined number of times. Hong merely refers to a synchronization, and not to registration.

For all of the above reasons, the combination of Hong with the AAPA does not show or suggest the invention are now claimed in claims 12-14. Reconsideration and withdrawal of the rejection of claims 12-14 under 35 U.S.C. § 103(a) are respectfully requested.

Fujimoto, U.S. Patent No. 6,263,200, shows a radio terminal apparatus that is equipped with a battery power saving function. Fujimoto sends out numerous Np call signals. The power

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supply of the mobile station is turned on/off based on: 1) the operation mode (MOD); 2) a number of times of continuous reception "Np" of the call signal; and 3) the remaining battery power quantity (B). None of these requirements of Fujimoto has any relation to the claimed control requirements. For example, Fujimoto bases the turning on/off of the power supply at least partially on the remaining battery quantity. This has nothing whatsoever to do with the claimed requirements of claim 12. Fujimoto's system is not based on an inability to register after successful acquisition of a downlink signal. Hence, even if combinable, there is no suggestion, absent Applicant's description of the invention, as to the conditions for turning off the receiver of a CDMA system. Even if Fujimoto could be combined with AAPA, the combination would only conserve battery power based upon: the reception of the signal a continuous amount of times, the operational mode, and the remaining battery quantity, but not an inability to register after successful acquisition of a pilot signal. Accordingly, the rejection of claims 12-14 based on a combination of AAPA and Fujimoto under 35 U.S.C. § 103(a) should be reconsidered and withdrawn and such action is respectfully requested.

For all of the above reasons, the rejections of claim 12-14 under 35 U.S.C. § 103(a) are legally and factually flawed. Furthermore, new claims 16-18 should be considered allowable for at least the same reasons as those discussed above with respects to claims 12-14. Such action is courteously solicited.

In light of the amendments and remarks above, this Application should be considered in condition for allowance and the case passed to issue. If there are any questions regarding this Amendment or the Application in general, a telephone call to the undersigned would be appreciated to expedite the prosecution of the Application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is

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hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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